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| 10/717,157 | 11/19/2003 | Lawrence A. Ray | 85761DMW | 6761 |

7590 09/28/2007
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| EXAMINER |
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DANG, DUY M

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| ART UNIT | PAPER NUMBER |
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2624

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09/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/717,157 | RAY, LAWRENCE A. | |
| | Examiner | Art Unit | |
| | Duy M. Dang | 2624 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
 4a) Of the above claim(s) 10-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>4/25/07</u> + <u>12/11/03</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Invention of Species 1, claims 1-11 in the reply filed on July 19, 2007 is acknowledged.
2. It is also noted that Applicant has indicated to cancel claims 12-19 in the reply, however, formal amendment is required to do so in response to this Office action.
3. It is noted that claims 10-11 are directed to text detection which corresponds to Species II as specified in the previous Office action mailed on 5/22/2007. Therefore, claims 10-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species II. Applicant's response to this matter is required in response to this Office action.

Claim Objections

4. Claim 5 is objected to under 37 CFR 1.75(c) as being in improper form because it depends from itself. Currently, claim 5 is assumed to be depend from claim 1 for prior comparison purposes.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 6-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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There is insufficient antecedent basis for the limitations in the following claims: “the entries”, “the second data structure”, “the data”, and “the first data structure” in lines 2-3 of claim 6; “the formation” in lines 1-2 of claim 7; and “the emphasis” in line 1 of each of claims 8-9.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-4, 11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 19, and 31 of U.S. Patent No. 7,035,467 (referred as the patent ‘467 hereinafter). An obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim is not patentably distinct from the reference claim(s) because the examined claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

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Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons.

It is noted that patented each of claims 2, 19, and 31 is a dependent claim and would include all the claimed features called in its corresponding parent claim that of claims 1, 18, and 29, respectively.

Regarding claim 1 of the instant application as a representative claim, the patented claim 2, for example, teaches: (a) obtaining a collection of digital images (see step a of patented claim 1); (b) detecting image patterns indicative of the presence of one or more faces in the digital images, thereby identifying one or more detected faces for each image in which a face is detected (see steps a-b of patented 1 and claim 2); (c) recognizing one or more faces from the detected faces for each of the images in which a face is detected (see step c of patented claim 1); and (d) scoring an image based on the relative frequency of occurrence of a recognized face within the collection of images, thereby producing an emphasis image characteristic of the most frequently occurring face in the collection of images (see steps c-e of patented claim 1).

While the patented claim 2 includes additional limitations not set forth in claim 1 of the instant application, the use of transitional term “comprising” in the instant claim 1 fails to preclude the possibility of additional elements. Therefore, claim 1 of the instant application fails to define an invention that is patentably distinct from claim 2 of the patent ‘467.

In addition, the instant claim 1 is not patentably distinct over patented claim 2 because patented claim 2 would anticipate of the instant claim 1 and anticipation is “the ultimate or

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epitome of obviousness". See *In re Kalm*, 154 USPQ 10 (CCPA 1967); *In re Dailey*, 178 USPQ 293 (CCPA 1973); and *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Regarding claim 2, patented claim 2 further teaches wherein the scoring step (d) comprises scoring an image based on the number of recognized faces detected in an image and on the number of occurrences within the image collection of the recognized faces within the image (see steps c-e of patented claim 1).

Regarding claim 3, while the patented claim 2 does not teach wherein the collection of digital images are obtained from a digital camera. It would have been obvious to one of ordinary skill in the art to use digital camera for digital image collection. The advantage to use digital camera is to allow post-process easily, saving money by not buying film, reuse digital film (memory such as CF, SD, ...).

Regarding claim 4, patented claim 2 further teaches wherein the collection of digital images are obtained from scanned film images (see last two lines of patented claim 1).

Regarding claims 7-9, the patented claim 2 does not teach the claimed features as recited in these claims 7-9. It would have been obvious to one of ordinary skill in the art to use an emphasis image as the formation of a photo-album, a cover image for photo-album and jewel case of a CD. By doing so, it would enhance the presentation of the photo-album and/or jewel case of a CD to the user.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turk et al. (USPN RE. 36,041) in view of Lu et al. (USPN 5,550,928).

Regarding claim 1, Turk teaches a method for selecting an emphasis image from a collection of images based on facial identification (see abstract, figure 1, and column 1 lines 56-59 and column 3 lines 14-32), said method comprising the steps of:

- (a) obtaining a collection of digital images (see camera depicted at 4 in figure 1);
- (b) detecting image patterns indicative of the presence of one or more faces in the digital images, thereby identifying one or more detected faces for each image in which a face is detected (see head locator module 8 and face recognizer 10 of figure 1 and column 3 lines 33-43);
- (c) recognizing one or more faces from the detected faces for each of the images in which a face is detected (see face recognizer 10 of figure 1).

Turk does not explicitly teach the claimed features as set forth step (d) that of “scoring an image based on the relative frequency of occurrence of a recognized face within the collection of images, thereby producing an emphasis image characteristic of the most frequently occurring face in the collection of images.”

Lu, in the same field of invention that of facial recognition, teaches: scoring an image based on the relative frequency of occurrence of a recognized face within the collection of images, thereby producing an emphasis image characteristic of the most frequently occurring face in the collection of images (see figure 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such claimed features as taught by Lu in combination with

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Turk in order to enhance the accuracy of the recognition and thereby to improve the consistency of the recognition system as suggested by Lu at column 23 lines 66-67).

Regarding claim 2, this claim is also rejected for the same reasons as set forth in claim 1 above.

Regarding claim 3, Turk further teaches wherein the collection of digital images are obtained from a digital camera (see camera 4 of figure 1 as well as cameras 32 and 34 of figure 3 in Lu).

Regarding claim 4, while both Turk and Lu do not teach wherein the collection of digital images are obtained from scanned film images. However, such claimed feature is well known in the art (Official Notice). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such well known feature in combination with Turk and Lu in order to digital image to be obtained from film images for better preservation and any post-processing purposes.

Regarding claims 5-6, Turk further teaches the steps of establishing a first data structure that stores data identifying each face and the images in which that face appears, and a second data structure that stores a list of the images and an entry in the list for the number of the faces that appear in each image (weights and eigenfaces in Turk refer to claimed first and second data structure and pointers as well).

Regarding claims 7-9, while both Turk and Lu do not teach the claimed features as recited in these claims 7-9, it would have been obvious to one of ordinary skill in the art to use an emphasis image as the formation of a photo-album, a cover image for photo-album and jewel

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case of a CD. By doing so, it would enhance the presentation of the photo-album and/or jewel case of a CD to the user.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M. Dang whose telephone number is 571-272-7389. The examiner can normally be reached on Monday to Friday from 6:00AM to 2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

dmd
9/07



DUY M. DANG
PRIMARY EXAMINER